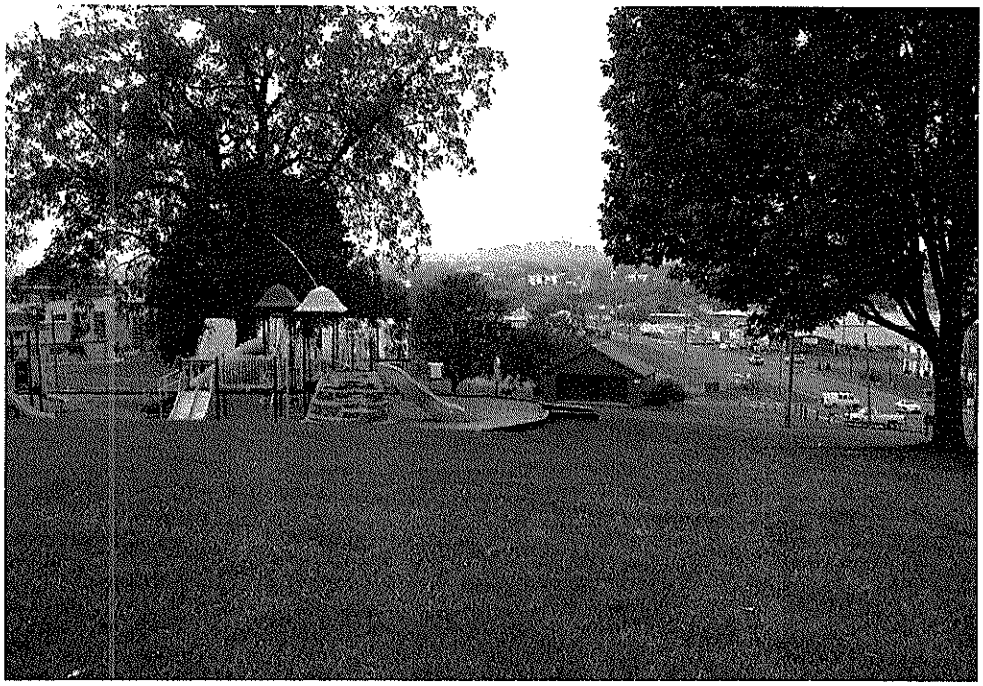
Ralph Sampson Park
Master Plan

Harrisonburg, Virginia



Prepared by:
Land Planning and Design Associates, Inc.
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Acknowledgements

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City of Harrisonburg Parks and Recreation Department

Director of Parks and Recreation
Lee Foerster

Assistant Parks and Recreation Director
David Wigginton

Atheltic Program Specialist
Stephanie Howard

Harrisonburg Parks and Recreation Commission
Lucy Simms Recreation Center Staff

Executive Summary

Ralph Sampson Park is located just northeast of dowtown Harrisonburg, Virginia and is part of the City's Parks and Recreation system. Existing facilities at the park include a shelter, restrooms, basketball courts, tennis courts, and playgrounds. The City requested a master plan for the park in order to better accommodate the needs of local citizens who use the park, as well as to upgrade worn and aged facilities.

The primary goal of this Master Plan is to establish a plan of action for Ralph Sampson Park that is representative of the desires of the community and the needs of the City; that respects the character of the site; and that can adapt to the future needs of the City and surrounding neighborhoods.

A site analysis determined that the park suffered from a lack of parking spaces, walking paths, and seating; that the restrooms and shelter were deteriorating; and that the park was missing, in general, a cohesive design. Information from the public meetings and surveys reinforced this conclusion as the primary comments were requests for walking trails, seating, and better restroom and shelter facilities.

To this end, the master plan recommends the addition of circuitous walking trails that can accomodate baby strollers and elderly persons; improved and additional restrooms and shelters, a sprayground, and a re-organization of the playground areas to create a central gathering space. The improvements are grouped at the top and bottom of the broad central slope to improve access and maintain the slope as open recreation area.

The proposed funding will come from the City of Harrisonburg's Capital Improvements Program. Additional funding sources may inlcude Federal and State grants through TEA-21, VA Department of Recreation and Conservation, and other entities identified later in this report.

In sum, the master planning process for Ralph Sampson Park has not only identified design needs for the park, but also recognized the fact that the park has a great deal of community support and use.

Introduction

The primary goal of the Ralph Sampson Park Master Plan is to create a design that satisfies the needs and desires of the neighboring residents, works with the existing character of the site, and is adaptable for future needs. The final Master Plan represents a consensus of all the stakeholders' needs and desires. In addition, the following considerations were addressed throughout the planning process:

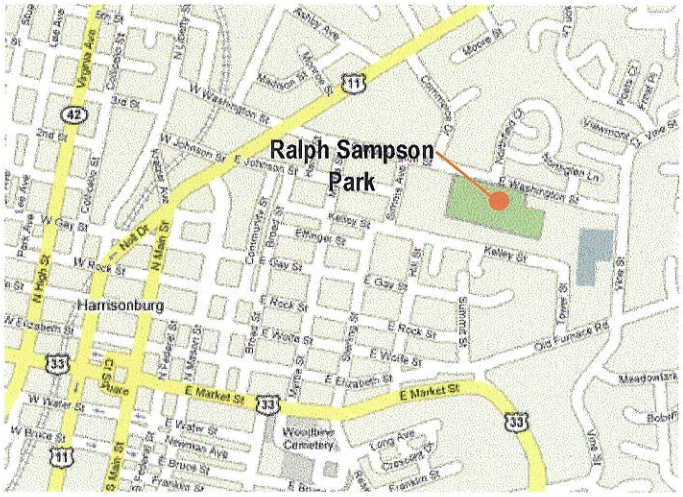
- Develop a flexible and appropriate program and design for the park
- Allow for multiple uses
- Create opportunities for active and passive recreation
- Allow opportunities for future expansion and modification
- Develop plans that are practical, constructible, and affordable
- Protect environmental resources
- Understand community priorities, phasing, and funding

Constructed in 1974, Ralph Sampson Park is an 9.25-acre park located between East Washington Street and Kelley Street in northeastern Harrisonburg. The park is located on a fairly steep slope that falls east to west and inlcudes at present:

- two play areas, one for 2-5 year olds and one for 5-12
- one picnic shelter
- one restroom
- three full size basketball courts
- an open recreation area on the slope
- wood-slat benches
- 12-space asphalt parking
- one sand horseshoe court
- two tennis courts
- one defunct sprayground pad

This park is typical of a classic neighborhood park as defined in the 2003 Comprehensive Parks and Recreation Master Plan for the City. The park allows for both active and passive recreation. Ralph Sampson Park serves residents mostly within a mile radius of the park, and within 5-15 minutes walking distance.

Vicinity Maps



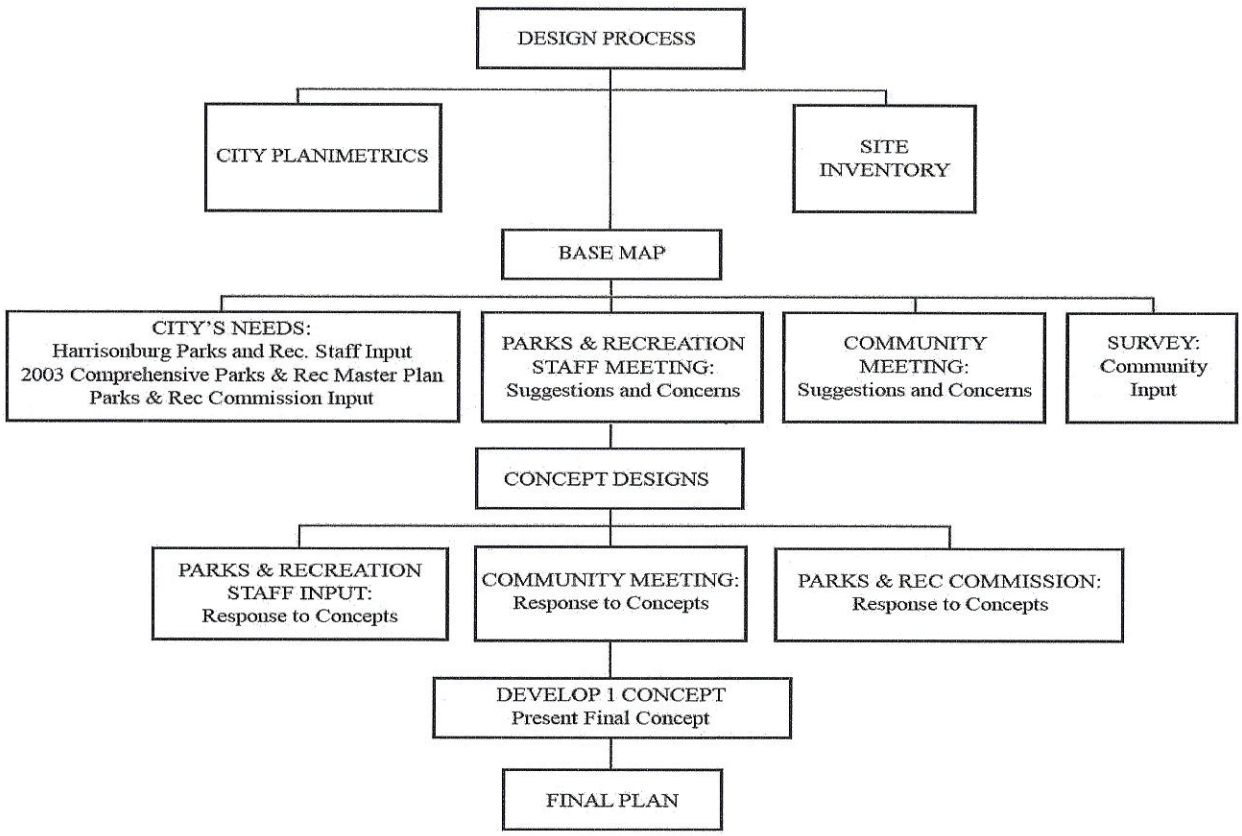
Design Process and Methodology

The first stage of the design process involved doing a site analysis to determine existing constraints and opportunities. A site visit and city planimetrics were used to compile a map of the existing conditions. Environmental factors such as topography, drainage, existing vegetation, views, property lines, neighboring land uses, trail connections, current park usage, fence lines, and existing facilities were analyzed. Location of these factors helped to decided the best possible placement for any proposed activities.

The second stage of the process was to gauge the demand for desired activities that best suit the needs and desires of the park users and the City by conducting a series of meetings with the public, the Parks and Recreation staff, and the Parks and Recreation Commission. Also, a survey (see Appendix A) was handed out to residents as an additional means of collecting information.

The user input provided the framework necessary to establish the preliminary design concept and corresponding programmatic elements for Ralph Sampson Park. This information helped to define what uses are currently taking place, what uses are not successful, and what uses are desired. The Parks and Recreation staff meeting helped to define what the maintenance and security concerns are at the park as well as additional information on existing activity at the park.

The intial conceptual designs were established by merging all the collected information together with the site analysis. The conceptual designs were illustrated in plan format and rendered for public presentation and comment. The designs were reviewed by the Parks and Recreation staff, and presented to the Parks and Recreation Commission and public in a series of three public meetings. Comments were noted and incorporated into the final Master Plan.



Design Process Flow Chart

Site Inventory & Public Input

Topography

Topography (LPDA 2007)

The overall topography of the site is quite steep in places. Relatively level areas exist in the western and eastern edges of the park, yet are connected with a grassy open area whose average slopes fall between 13 and 15 percent. The high point of the park is located along the eastern property boundary and has an elevation of 1450.9 feet above mean sea level. The lowest point is located along the western property boundary and is approximately 1398 feet above mean sea level; this results in an elevation change of 52.9 feet. A broad ridge extends from the high point southward and divdes the main slope from a bowl-shaped depression to the southeast. The depression is said to flood during periods of heavy rain.

Vegetation (LPDA 2007)

The topography of the site lends itself to locating park amenities at the top and bottom of the slope to avoid extensive regrading efforts. It is also necessary to avoid placing any facilities in the depression at present, until drainage issues can be resolved.

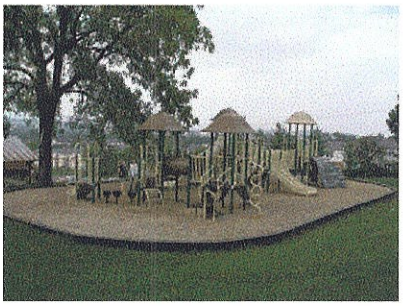
Vegetation

The primary form of vegetation located in the park is turf grass, which is apparently mown regularly by maintenance staff. There are numerous mature trees, along with a few new tree plantings. Shrub plantings are

Site Inventory

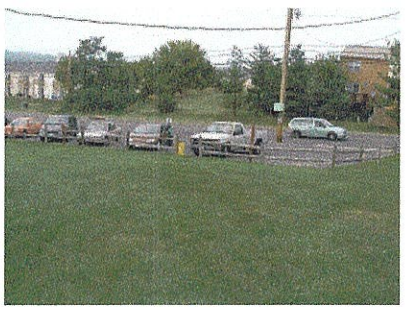
Views to West (LPDA 2007)

Restroom and Shelter (LPDA 2007)



Playground (LPDA 2007)

Horseshoe Court (LPDA 2007)



Parking Lot (LPDA 2007)

limited to the restroom foundation. Tree species include pines, red maples, ash, redbud, honeylocust tree, hackberry, and hickory. Vegetation highlights consist of an allee of ash trees running along the southern edge of the park, and a large 4-trunk hickory tree growing northeast of the tennis courts.

Given the predominance of healthy, mature trees on the site, one of the goals of the master plan is to retain as many existing trees as possible while allowing room for new facilities. In addition, installing a greater variety of ornamental shrubs and perennials would enhance the character of the park.

Views

Due to the substantial elevation change in the park, good long-range views of the City are afforded when looking toward the northwest. Views to adjacent properties are somewhat incompatible with the character of the park.

The views should be preserved by limiting the placement and height of any amenity built on the slope below the upper level area. Existing vegetation should be maintained along the southern property line to limit views to private property.

Existing Facilities

Many of the existing facilities are in disrepair. The restroom siding is deteriorating at its base and the ground around the foundation shows signs of erosion. The shelter roof is rusting. The horseshoe pit sand is escaping from its edging. The parking lot is unsafe from a circulation standpoint.

Facilities in good condition include the tennis courts, basketball courts, and playground equipment.

The park requires updated and new amenities to fully serve the community and be a safe an attractive place to visit.

Accessibility

Accessibility is a major issue at Ralph Sampson park, both in terms of reaching the park and traveling through it. The main concerns discerned from the site analysis and community input are limited and unsafe parking and lack of any type of interior circulation.

In order to rectify this, new parking lots must be constructed that follow accepted design standards for safety and maneuverability and walking paths that connect the main park facilities should be installed. The walking paths should be of a smooth, hard-surface materal (such as crushed stone or asphalt) that is accessible to people of all physical abilities and can support wheelchairs and baby strollers.

Public Input

Public input was an important part of determining how the site was utilized and what changes were needed to make the park a more user-friendly location within the community. Public input was obtained in two ways: via a public survey that was mailed to the approximately 3,000 City residents who lived within a mile of the park, and from comments obtained during three public meetings.

The surveys and verbal comments are summarized in the following list; they are placed in order of most-requested or mentioned features and issues to least requested. The adjacent column lists existing amenities that residents wanted to retain.

Desirable New Features

- Walking trails (No. 1 request)
- Seating areas
- Shelters
- Accessibility through park
- Activities for older adults
- Sprayground/Splash Park
- Restroom access
- More plantings/landscaping
- Amphitheater

Desirable Existing Features

- Basketball
- Open space
- Playgrounds
- Horseshoes

Opportunities and Constraints

After reviewing the data collected during the site visit and compiling the results of the surveys and public and City comments, a list of known opportunities and constraints was developed to help guide preparation of two draft conceptual diagrams.

Opportunities

- Close to neighborhoods
- Close to City
- Good views
- Good visibility around park
- Rolling topography
- Adjacent to Lucy Simms Center
- Pre-existing amenities/facilities
- Generous open spaces
- Mature trees

Constraints

- Parking lot inconvenient/unsafe
- No access to interior of park
- Steep slopes limit accessibility
- No handicap accessibility
- Rolling topography
- Condition issues

Draft Conceptual Master Plans

A public meeting was held at the Lucy Simms Recreation Center on November 19 to present the two draft conceptual master plans that were prepared based on the site analysis and public input. Refer to the following page for Concepts A and B.

Public and City Responses to Concepts A and B

City staff, the Parks and Recreation Commission, and the public discussed both concepts during the meeting, and determined that the final conceptual master plan should resemble Concept B. The consensus was that the turn-around access road in Concept B would allow vehicular access to the amenities found at the top of slope while preserving much of the open space that already exists in the park. The list below is a summary of comments:

Suggested Improvements:

- The tennis courts need to remain where they currently exist.
- The access road running through the open space may be intrusive and encourage cruising.
- Plan a walk that connects the playground areas with the larger loop walk.
- Consider running electricity to the bandshell, if programming requires it.
- Make sure there is enough parking, but not so much that intrudes upon the appearance of the park.
- Retain the southern portion of the loop trail to ensure access to the entire park.
- Retain the seating area east of the basketball courts that will contain game tables and benches.

Draft Conceptual Master Plan - Option A

Draft Conceptual Master Plan - Option B

Final Plan Narrative

Overview

The master plan for Ralph Sampson Park meets the original goal of serving the surrounding neighborhoods, respecting the character of the site, and being adaptable for future needs. The new design was crafted from input from the public and City of Harrisonburg officials, takes into account the pros and cons of the steep topography, and can be built in phases as funding becomes available. The text below describes the master plan elements in more detail.

Crushed Stone Walking Trail

Walking Trails

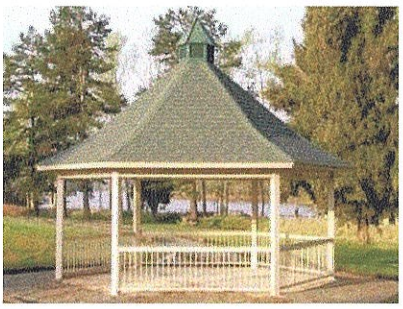
The main request for improving the park was the addition of walking trails. Roughly 1/4 mile of crushed stone walking trails have been added to the park. The trails are connected to sidewalks to form a loop system. The trails are proposed to be 6 feet wide to allow two park users to pass comfortably, as well as people in wheelchairs and pushing baby strollers. Future beautification efforts may include planting perennials, shrubs, and trees along the trail edges to further enhance the park's appearance.

Shelter

Playgrounds

The existing play equipment will be retained and relocated up the slope to the new shelter/playground/tennis complex. The relocation will create a more permanent setting for the play equipment, provide a better seating and supervision opportunities, and create a connection between the play areas and the shelter.

Playground surfacing could be either engineered wood fiber mulch, rubber matting, poured-in-place rubber surfacing, or another surface approved for use with play equipment. The square footage dedicated to containg the play equipment should be sized appropriately according to industry-standard fall zones.



Gazebo

Shelters and Restrooms

Other highly-requested items were additional shelters and improved restroom facilities. The master plan adds two new shelters, a gazebo, a restroom, and a combination shelter/restroom. These features can be constructed as funding becomes available. Another option is to retain the existing restroom building, rehabilitate it, and relocate it according to the master plan.

These buildings should be of a consistent design aesthetic in order to present an attractive, uniform appearance throughout the park. If the same manufacturer is not available for each item, similar colors and materials should be utilized.

Sprayground/Splash Park

Sprayground/Splash Park

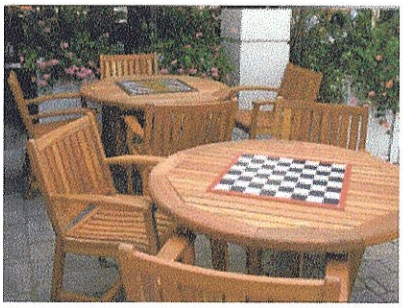
A new sprayground will draw users from the surrounding neighborhood and likely further afield. The sprayground is connected to the restroom building in order to provide a changing room. It is also located in close proximity to the upgraded parking lot in order to accomodate the expected influx of sprayground users.

The sprayground will likely be of the recirculating type to save water, particularly in light of recent drought conditions. It should have a variety of water-related activities - all of which are available from the manufacturer. The City should also consider installing a fence around the sprayground to aid in child supervision.

Access Road and Parking

An access road and parking spaces were planned at the eastern entrance to respond to calls for improved accessibility and additional means of surveillance. The road allows vehicles to enter much further into the site than before, which in turn gives visitors the ability to be dropped off closer to park amenities. 20 additional parking spaces provide much needed parking, as well. Both the road and parking are intended to be paved with asphalt.

The existing parking lot in the northwest corner of the site is planned to be demolished and replaced with a larger and safer lot capable of accomodating 22 cars.



Game Tables

Seating Areas

Many survey respondents and meeting attendees requested seating areas where visitors could simply sit and enjoy the park scenery or engage in conversation or table games, such as chess or checkers.

Seating areas such as these are incorporated into the playground area near the tennis courts, attached to the shelter near the horseshoes courts, and along the trail east of the basketball courts. Site furnishings might include tables and chairs, picnic tables, and gaming tables with built-in chess/checkers tabletops.

Horseshoes Area

An additional horseshoes court was requested to allow more than one set of users to play at the same time. The courts remain in the same location as at present. The courts are couched between a row of shade trees that will provide visual separation from on-going basketball games, and a shelter/seating area.

Arboretum Walk

Arboretum Walk

The arboretum walk fulfills the request of many neighbors to include more attractive landscaping and plantings in the park. The walk is intended to be a loop path that is planted on either side with plants of varying colors, textures, and smells. Benches should be provided at various spots to allow people to rest and converse. Plantings should include a variety of species, from perennials and shrubs to ornamental trees and large shade trees. Tags and labels would aid in identification and create excellent educational opportunities.

Additional Recommendations

With the many new additions planned for this park, installing screening along the southern boundary would both mitigate increased noise levels and visitorship numbers for adjacent residents and create a more natural park setting for visitors. Screening may be in the form of densely-planted vegetation or attractive privacy fencing.

Final Master Plan

Grading, Utilities, and Stormwater Management

Grading

Grading and stormwater management for this site is a challenge, given the steep slope upon which the park is situated. In order for the majority of amenities to be accessible to persons with physical impairments, the ground must be re-shaped to allow features such as trails and entrance drives to be constructed at a manageable slope.

To ensure that most of the park is accessible, steps and retaining walls were incorporated into the master plan. These features are found in the northwest corner of the park and are used to mitigate the steep slopes here; this area is particularly challenging because the amenities here, inlcuding the sprayground and shelters, need fairly level ground in order to work properly.

Coordination of grading work is essential, particularly if the master plan is implemented in phases and if the City intends to construct certain portions independently of the plan.

Utilities

As the master plan is currently designed, some utility work will need to be done in order to make the shelters and restrooms fully operable.

Because Shelter #1 is a new facility, water, sanitary sewer, and electric service must be run to the building. It is likely that the water and sewer can be tied into the City's existing lines located on East Washington Street. Electricity may be able to obtained from existing underground service that powers light poles currently standing in the park.

The restroom planned near the sprayground will require water, sewer, and electricity, as well. An existing water line extends into the area, which should make water connections fairly easy. Sewer lines can connect into the City's line on East Washington Street, while electricty may be able to utilize existing service.

Stormwater Management

Stormwater management can be dealt with in a number of ways. In the upper section, water either flows back onto the street from the access road or is piped through a system of drain inlets, culverts, and swales. Collected water outfalls either into rain gardens or down the open space slope. In order to reduce the erosion potential from the outfall around the turnaround, a trench drain is proposed to catch water and then release it slowly.

At the bottom of the slope, the intent is to allow water to flow into an existing drain inlet located near the basketball court and supplement with additional drain inlets and culverts as needed. In the northwest corner of the park, water will be routed around the sprayground via a swale and then sent into an existing off-site swale and the new parking lot. Depending on the amount of water reaching this part of the park, underground storage may need to be located beneath the parking lot.

Final Master Plan Grading & Utilities

Funding

Potential Grant Sources

- Virginia Department of Conservation and Recreation Land and Water Conservation Fund
- TEA-21 Grants (potential for E. Washington sidewalk assistance and rain gardens)
- Additional grant sources may be found at: http://www07.grants.gov/

Volunteer Resources

- Master Gardener programs to install landscaping and create arboretum labels
- Service organizations, such as the Kiwanis or Rotary, to move playground equipment
- Vocational school programs to build benches or game tables
- Contact Simms Center, Boys & Girls Club, Boy Scouts, Girl Scouts, and organizations associated with James Madison University

The improvements to Ralph Sampson Park will likely be phased, depending on available funding from the City's Capital Improvements Fund over a five-year period. Funding will come from the General Fund or Community Development Block Grant. In addition, there may be grant opportunities available from various Federal, State, and local entities. Volunteer labor and donations of materials will also help defray the cost of implementing the master plan.

Estimate of Probable Cost

The following is the estimate of probable cost representing the proposed improvements for Ralph Sampson Park. Unit costs were obtained through a combination of prior bid tabulations, directly from the supplier, and from previous experience with park improvement costs. All measurements have been taken from the final master plan presented in this document. Design fees and contingency may vary depending on inflation and when the actual park improvements take place. Subsequent pages show the probable cost of completing the park in one effort, and the probable costs for five phases.

Phased Costs

Upon request from the Harrisonburg Parks and Recreation Department, the overall cost estimate was divided into five phases to ease the burden of funding park construction all at once. The five phases were based on comments from the public meetings and direct input from the Parks and Recreation Department. The phasing is presented in order of amenities that are most feasible and desirable at first to those that can be installed as time and money allows.

1. *Access Road and Upper Parking Areas*
   - Access road, turnaround, and two parking areas
2. *Main Playground and Shelter Area*
   - Upper shelter/restroom #1, shelter #2, play & seating areas, concrete walks
3. *Sprayground Area*
   - Sprayground, restroom, lower parking lot, steps
4. *Lower Area*
   - Shelter #3, steps, and seating patio near basketball courts
5. *Arboretum Walk*
   - Plantings and bandshell

* Trails and horseshoe courts will be installed by the City and have not been included in this cost estimate.

Ralph Sampson Park - Master Plan

Estimate of Probable Cost - SINGLE PHASE 2/14/2008

Prepared By: Land Planning and Design Associates Inc. Charlottesville, VA JLB

	QTY.	UNIT	UNIT PRICE	TOTAL
Site Preparation, E&S, and Utilities				
Mobilization	1	EA	$10,000.00	$ 10,000.00
Earthwork	10,000	CY	$5.00	$ 50,000.00
Finish Grading	18,400	SY	$3.00	$ 55,200.00
Asphalt demo	6,500	SF	$1.00	$ 6,500.00
Sanitary sewer (4" line)	500	LF	$45.00	$ 22,500.00
Manhole	2	EA	$3,000.00	$ 6,000.00
Water (3/4" line)	330	LF	$40.00	$ 13,200.00
Electric (new panel, run, and conduit)	1.5	LS	$10,000.00	$ 15,000.00
18" RCP Stormwater Culverts	230	LF	$68.00	$ 15,640.00
Standard DI 1 inlet	3	EA	$2,500.00	$ 7,500.00
Riprap	50	TON	$80.00	$ 4,000.00
Silt Fence	1,600	LF	$4.00	$ 6,400.00
E&S Fabric/Jute Mesh	120	SY	$1.75	$ 210.00
			Sub total	**$ 212,150**
Parking and Lighting				
Asphalt- 1" surfacing and 3" base course	564	TON	$95.00	$ 53,580.00
Aggregate- Type 21-A, 6" base	855	TON	$28.00	$ 23,940.00
Pavement Markings- 4" striping and ADA markings	42	Stalls	$12.00	$ 504.00
Concrete Walks and Slabs- 4" thick	18,200	SF	$6.00	$ 109,200.00
Unit Pavers- sand-set on 4" gravel base, 21-A	1,215	SF	$16.00	$ 19,440.00
Playground- fibar mulch, 12"	63	CY	$60.00	$ 3,780.00
Lighting	16	EA	$3,500.00	$ 56,000.00
			Sub total	**$ 266,444**
Structures				
(#1) Shelter with Restroom- wood prefab 24' x 24'	1	EA	$45,000.00	$ 45,000.00
(#s 2 and 3) Shelter-wood prefab 24' x 24'	2	EA	$24,000.00	$ 48,000.00
Restroom- CMU, 4 person prefab	1	EA	$80,000.00	$ 80,000.00
Gazebo-wood, prefab 25' dia.	1	EA	$17,000.00	$ 17,000.00
Playground-removal and installation of existing equipment	1	LS	$5,000.00	$ 5,000.00
Sprayground/Splash Park	1	LS	$110,000.00	$ 110,000.00
Concrete Steps	27	LF	$50.00	$ 1,350.00
Retaining Wall	55	LF	$100.00	$ 5,500.00
			Sub total	**$ 311,850**
Site Furnishings				
Ornamental fence - 4' high, steel, w/ 2 gates	1	LS	$12,000.00	$ 12,000.00
Tables- picnic, 6' x 3', no footings	2	EA	$800.00	$ 1,600.00
Tables- game table and seating table, 3' x 3'	6	EA	$800.00	$ 4,800.00
Benches- concrete footing	12	EA	$1,000.00	$ 12,000.00
Trash Receptacle	4	EA	$600.00	$ 2,400.00
Drinking Fountains	1	EA	$2,750.00	$ 2,750.00
Bicycle Racks- 5 bike spaces	2	EA	$800.00	$ 1,600.00
			Sub total	**$ 37,150**
Landscape				
Shade Trees	17	EA	$350.00	$ 5,950.00
Ornamental Trees	9	EA	$250.00	$ 2,250.00
Shrubs - Large	200	EA	$50.00	$ 10,000.00
Shrubs - Small	250	EA	$35.00	$ 8,750.00
Perennials	300	EA	$5.00	$ 1,500.00
Seed Mix	50	MSF	$100.00	$ 5,000.00
Bed Preparation-amendments, tilling	70	CY	$6.00	$ 420.00
Mulch	70	CY	$45.00	$ 3,150.00
			Sub total	**$ 37,020**

*Costs do not include design fees
*Costs will need to be adjusted yearly according to market values and inflation

		Total	**$ 864,614**
		15% Contingency	**$ 129,692**
TOTAL (5 Phases)	**$ 1,008,793**	***TOTAL***	**$ 994,306**

Ralph Sampson Park - Master Plan

Estimate of Probable Phasing Cost 2/14/2008
PHASE 1 - ACESS ROAD & PARKING
Prepared By: Land Planning and Design Associates Inc. Charlottesville, VA JLB

	QTY.	UNIT	UNIT PRICE	TOTAL
Site Preparation, E&S, and Utilities				
Mobilization	1	EA	$5,000.00	$ 5,000.00
Earthwork	1,000	CY	$5.00	$ 5,000.00
Finish Grading	2,500	SY	$3.00	$ 7,500.00
18" RCP Stormwater Culverts	170	LF	$68.00	$ 11,560.00
Standard DI 1 inlet	1	EA	$2,500.00	$ 2,500.00
Riprap	25	TON	$80.00	$ 2,000.00
Silt Fence	500	LF	$4.00	$ 2,000.00
E&S Fabric/Jute Mesh	60	SY	$1.75	$ 105.00
			Sub total	**$ 35,665**
Parking and Lighting				
Asphalt- 1" surfacing and 3" base course	369	TON	$95.00	$ 35,055.00
Aggregate- Type 21-A, 6" base	560	TON	$28.00	$ 15,680.00
Pavement Markings- 4" striping and ADA markings	20	Stalls	$12.00	$ 240.00
Lighting	12	EA	$3,500.00	$ 42,000.00
			Sub total	**$ 92,975**
Landscape				
Seed Mix	15	MSF	$100.00	$ 1,500.00
			Sub total	**$ 1,500**
			Total	**$ 130,140**
			15% Contingency	**$ 19,521**
			TOTAL	**$ 149,661**

*Costs do not include design fees
*Costs will need to be adjusted yearly according to market values and inflation

Ralph Sampson Park - Master Plan

Estimate of Probable Phasing Cost 2/14/2008
PHASE 2 - MAIN AREA
Prepared By: Land Planning and Design Associates Inc. Charlottesville, VA JLB

	QTY.	UNIT	UNIT PRICE	TOTAL
Site Preparation, E&S, and Utilities				
Mobilization	1	EA	$5,000.00	$ 5,000.00
Earthwork	1,200	CY	$5.00	$ 6,000.00
Finish Grading	6,500	SY	$3.00	$ 19,500.00
Sanitary sewer (4" line)	370	LF	$45.00	$ 16,650.00
Manhole	2	EA	$3,000.00	$ 6,000.00
Water (3/4" line)	280	LF	$40.00	$ 11,200.00
Electric (new panel, run, and conduit)	1	LS	$10,000.00	$ 10,000.00
18" RCP Stormwater Culverts	50	LF	$68.00	$ 3,400.00
Standard DI 1 inlet	1	EA	$2,500.00	$ 2,500.00
Riprap	12	TON	$80.00	$ 960.00
Silt Fence	500	LF	$4.00	$ 2,000.00
E&S Fabric/Jute Mesh	30	SY	$1.75	$ 52.50
			Sub total	**$ 83,263**
Parking, Trails, and Surfacing				
Concrete Walks and Slabs- 4" thick	10,600	SF	$6.00	$ 63,600.00
Unit Pavers- sand-set on 4" gravel base, 21-A	690	SF	$16.00	$ 11,040.00
Playground- fibar mulch, 12"	63	CY	$60.00	$ 3,780.00
			Sub total	**$ 78,420**
Structures				
Shelter with Restroom- wood prefab 24' x 24'	1	EA	$45,000.00	$ 45,000.00
Shelter-wood prefab 24' x 24'	1	EA	$24,000.00	$ 24,000.00
Playground-removal and installation of existing equipment	1	LS	$5,000.00	$ 5,000.00
			Sub total	**$ 74,000**
Site Furnishings				
Benches- concrete footing	6	EA	$1,000.00	$ 6,000.00
Trash Receptacle	2	EA	$600.00	$ 1,200.00
Drinking Fountains	1	EA	$2,750.00	$ 2,750.00
Bicycle Racks- 5 bike spaces	1	EA	$800.00	$ 800.00
			Sub total	**$ 10,750**
Landscape				
Shade Trees	3	EA	$350.00	$ 1,050.00
Ornamental Trees	2	EA	$250.00	$ 500.00
Shrubs - Large	20	EA	$50.00	$ 1,000.00
Seed Mix	15	MSF	$100.00	$ 1,500.00
Bed Preparation-amendments, tilling	5	CY	$6.00	$ 30.00
Mulch	5	CY	$45.00	$ 225.00
			Sub total	**$ 4,305**
			Total	**$ 250,738**
			15% Contingency	**$ 37,611**
			TOTAL	**$ 288,348**

*Costs do not include design fees
*Costs will need to be adjusted yearly according to market values and inflation

Ralph Sampson Park - Master Plan

Estimate of Probable Phasing Cost 2/14/2008
PHASE 3 - SPRAYGROUND
Prepared By: Land Planning and Design Associates Inc. Charlottesville, VA JLB

	QTY.	UNIT	UNIT PRICE	TOTAL
Site Preparation, E&S, and Utilities				
Mobilization	1	EA	$5,000.00	$ 5,000.00
Earthwork	6,000	CY	$5.00	$ 30,000.00
Finish Grading	8,000	SY	$3.00	$ 24,000.00
Asphalt demo	6,500	SF	$1.00	$ 6,500.00
Sanitary sewer (4" line)	130	LF	$45.00	$ 5,850.00
Water (3/4" line)	50	LF	$40.00	$ 2,000.00
Electric (run and conduit)	1	LS	$5,000.00	$ 5,000.00
Silt Fence	350	LF	$4.00	$ 1,400.00
			Sub total	**$ 79,750**
Parking and Lighting				
Asphalt- 1" surfacing and 3" base course	195	TON	$95.00	$ 18,525.00
Aggregate- Type 21-A, 6" base	295	TON	$28.00	$ 8,260.00
Lighting	4	EA	$3,500.00	$ 14,000.00
Pavement Markings- 4" striping and ADA markings	22	Stalls	$12.00	$ 264.00
Concrete Walks and Slabs- 4" thick	3,050	SF	$6.00	$ 18,300.00
Unit Pavers- sand-set on 4" gravel base, 21-A	165	SF	$16.00	$ 2,640.00
			Sub total	**$ 61,989**
Structures				
Restroom- CMU, 4 person prefab	1	EA	$80,000.00	$ 80,000.00
Sprayground/Splash Park	1	LS	$110,000.00	$ 110,000.00
Concrete Steps	15	LF	$50.00	$ 750.00
Retaining Wall	55	LF	$100.00	$ 5,500.00
			Sub total	**$ 196,250**
Site Furnishings				
Ornamental fence - 4' high, steel, w/ 2 gates	1	LS	$12,000.00	$ 12,000.00
Benches- concrete footing	1	EA	$1,000.00	$ 1,000.00
Trash Receptacle	1	EA	$600.00	$ 600.00
Bicycle Racks- 5 bike spaces	1	EA	$800.00	$ 800.00
			Sub total	**$ 14,400**
Landscape				
Shade Trees	3	EA	$350.00	$ 1,050.00
Seed Mix	8	MSF	$100.00	$ 800.00
Mulch	3	CY	$45.00	$ 135.00
			Sub total	**$ 1,985**

*Costs do not include design fees
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Total	$	**354,374**
15% Contingency	$	**53,156**
TOTAL	$	**407,530**

Ralph Sampson Park - Master Plan

Estimate of Probable Phasing Cost 2/14/2008
PHASE 4 - LOWER AREA
Prepared By: Land Planning and Design Associates Inc. Charlottesville, VA JLB

	QTY.	UNIT	UNIT PRICE	TOTAL
Site Preparation, E&S, and Utilities				
Mobilization	1	EA	$5,000.00	$ 5,000.00
Earthwork	1,200	CY	$5.00	$ 6,000.00
Finish Grading	1,200	SY	$3.00	$ 3,600.00
18" RCP Stormwater Culverts	10	LF	$68.00	$ 680.00
Riprap	6	TON	$80.00	$ 480.00
Standard DI 1 inlet	1	EA	$2,500.00	$ 2,500.00
Silt Fence	180	LF	$4.00	$ 720.00
E&S Fabric/Jute Mesh	25	SY	$1.75	$ 43.75
			Sub total	**$ 19,024**
Parking and Lighting				
Concrete Walks and Slabs- 4" thick	3,200	SF	$6.00	$ 19,200.00
Unit Pavers- sand-set on 4" gravel base, 21-A	360	SF	$16.00	$ 5,760.00
			Sub total	**$ 24,960**
Structures				
Shelter-wood prefab 24' x 24'	1	EA	$24,000.00	$ 24,000.00
Concrete Steps	13	LF	$50.00	$ 650.00
			Sub total	**$ 24,650**
Site Furnishings				
Tables- game table and seating table, 3' x 3'	6	EA	$800.00	$ 4,800.00
Tables- picnic, 6' x 3', no footings	2	EA	$800.00	$ 1,600.00
Benches- concrete footing	2	EA	$1,000.00	$ 2,000.00
Trash Receptacle	1	EA	$600.00	$ 600.00
			Sub total	**$ 9,000**
Landscape				
Shade Trees	4	EA	$350.00	$ 1,400.00
Shrubs - Large	16	EA	$50.00	$ 800.00
Seed Mix	8	MSF	$100.00	$ 800.00
Bed Preparation-amendments, tilling	6	CY	$6.00	$ 36.00
Mulch	6	CY	$45.00	$ 270.00
			Sub total	**$ 3,306**

*Costs do not include design fees
*Costs will need to be adjusted yearly according to market values and inflation

Total	**$ 80,940**
15% Contingency	**$ 12,141**
TOTAL	**$ 93,081**

Ralph Sampson Park - Master Plan

Estimate of Probable Phasing Cost 2/14/2008
PHASE 5 - ARBORETUM WALK
Prepared By: Land Planning and Design Associates Inc. Charlottesville, VA JLB

	QTY.	UNIT	UNIT PRICE	TOTAL
Site Preparation, E&S, and Utilities				
Mobilization	1	EA	$5,000.00	$ 5,000.00
Earthwork	100	CY	$5.00	$ 500.00
Finish Grading	200	SY	$3.00	$ 600.00
Silt Fence	150	LF	$4.00	$ 600.00
			Sub total	**$ 6,700**
Parking, Trails, and Surfacing				
Concrete Walks and Slabs- 4" thick	1,385	SF	$6.00	$ 8,310.00
			Sub total	**$ 8,310**
Structures				
Gazebo-wood, prefab 25' dia.	1	EA	$17,000.00	$ 17,000.00
			Sub total	**$ 17,000**
Site Furnishings				
Benches- concrete footing	3	EA	$1,000.00	$ 3,000.00
			Sub total	**$ 3,000**
Landscape				
Shade Trees	7	EA	$350.00	$ 2,450.00
Ornamental Trees	7	EA	$250.00	$ 1,750.00
Shrubs - Large	164	EA	$50.00	$ 8,200.00
Shrubs - Small	250	EA	$35.00	$ 8,750.00
Perennials	300	EA	$5.00	$ 1,500.00
Seed Mix	3	MSF	$100.00	$ 300.00
Bed Preparation-amendments, tilling	60	CY	$6.00	$ 360.00
Mulch	60	CY	$45.00	$ 2,700.00
			Sub total	**$ 26,010**

*Costs do not include design fees
*Costs will need to be adjusted yearly according to market values and inflation

Total	**$ 61,020**
15% Contingency	**$ 9,153**
TOTAL	**$ 70,173**